CASE DOCKET NO. P/4593

THE HONORABLE COMMISSIONER OF
PATENTS & TRADEMARKS
WASHINGTON, DC 20231

SIR:

Transmitted herewith for filing is the patent application of

Inventor: ALBERT A. BURLANDO

For: REFLECTIVE WARNING AND LOCATOR COLLAR FOR HYDRANTS, PYLONS AND SUPPORT POSTS

Enclosed are:

[3] _____ sheets of drawing(s). [ ] Formal [X] Informal

[ ] An Assignment of the invention to _____

_____

[ ] A certified copy of a _____ application.

[X] An Associate Power of Attorney.

[X] A Verified Statement to establish small entity status under 37 C.F.R. 1.9 and 37 C.F.R. 1.37.

[ ]

The filing fee has been calculated as shown below :

	(Col. 1)	(Col. 2)	Small Entity		Other Than a Small Entity	
For:	No. File	No.Extra	Rate	Fee	Rate	Fee
Basic Fee				$345.00		$690.00
Total Clms	-20-	*				
Ind. Clms	- 3-	*				
[]			TOTAL	$345.00	TOTAL	

*If the difference in Col. 1 is less than 0, enter "0" in Col. 2

[ ] Please charge my Deposit Account No. _____ in the amount of $_____.
A duplicate copy of this sheet is enclosed.

[X] A check in the amount of $ 345.00 to cover the filing fee is enclosed. The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. _____. A duplicate copy of this sheet is enclosed.

[ ] Any additional filing fees required under 37 C.F.R. 1.16.

[ ] Any patent application processing fees under 37 C.F.R. 1.17.

[ ] The Commissioner is hereby authorized to charge payment of the following fees during the pendancy of this application or credit any overpayment to Deposit Account No. _____.
A duplicate copy of this sheet is enclosed.

[ ] Any patent application processing fee under 37 C.F.R. 1.17.

[ ] The issue fee set in 37 C.F.R. 1.18 at or before mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.31(b).

[ ] Any filing fee under 37 C.F.R. 1.16 for presentation of extra claims.

Applicant or patentee ALBERT A. BURLANDO Attorney

Serial No. or Patent No. _____ Docket no. P/4593

Filed or Issued: _____

For: REFLECTIVE WARNING AND LOCATOR COLLAR FOR HYDRANTS, PYLONS AND SUPPORT POSTS

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) and 1.27(b)) INDEPENDENT INVENTOR

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR § 1.9 (c) for purposes of paying reduced fees under section 41 (a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled REFLECTIVE WARNING AND LOCATOR COLLAR FOR HYDRANTS, PYLONS AND SUPPORT POSTS described in

[X] the specification filed herewith

[ ] application serial no. _____ filed _____

[ ] Patent No. _____ issued _____

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9 (c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9 (d) or a nonprofit organization under 37 CFR 1.9 (e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

[ ] no such person, concern, or organization

[ ] persons, concerns or organizations listed below*

*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities, (37 CFR 1.27)

FULL NAME _____

ADDRESS _____

[ ] Individual [ ] Small Business Concern [ ] Nonprofit Organization

FULL NAME _____

ADDRESS _____

[ ] Individual [ ] Small Business Concern [ ] Nonprofit Organization

FULL NAME _____

ADDRESS _____

[ ] Individual [ ] Small Business Concern [ ] Nonprofit Organization

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28 (b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, an patent issuing thereon, or any patent to which this verified statement is directed.

ALBERT A. BURLANDO		
NAME OF INVENTOR	NAME OF INVENTOR	NAME OF INVENTOR
Albert A. Burlando		
Signature of Inventor	Signature of Inventor	Signature of Inventor
5-18-00		
Date	Date	Date

P/4593

REFLECTIVE WARNING AND LOCATOR COLLAR FOR HYDRANTS, PYLONS AND SUPPORT POSTS

Priority is hereby claimed to United States Provisional Patent Application 60/140,739, which was filed on June 25, 1999.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to the field of fire hydrants, and also to pylons and support posts found both on land and in water, and a reflective or fluorescent means to identify or warn of their location.

2. Description of the Prior Art

Fire hydrants are a part of every day life and in most communities they are located in spaced apart relationship in order to provide a source of water to fireman in fighting a fire within the proximity of the particular hydrant. Fire hydrants are recognized in our daily travels, but their exact location does not often register in our minds. The same holds true for fire fighters when responding to a fire when they visually identify the location of the nearest hydrant as a result of their bright color. However, in the hours of darkness and other periods of low visibility, the fire hydrants, even though brightly colored, may not be readily identifiable to the fire fighters and the inability to locate the

fire hydrant may delay the commencement of the fire fighting activities and thus endanger not only property, but life.

In such situations of low visibility or darkness, in warm and temperate climates, a solution to the problem has been to embed in the concrete or asphalt proximate to the fire hydrant, a reflective or fluorescent member which is easily visible to the fire fighter for identifying the location of a fire hydrant.

This solution has not been available in colder climates which experience a winter period where snow may be prevalent which may cover the reflective or fluorescent identifier. Still further, in such climates, snow removal may have a deleterious affect on the reflective or fluorescent identifier embedded in the concrete or asphalt adjacent the fire hydrant such that its life span is limited.

Therefore there exists the need for a reflective or fluorescent member that can be easily secured to or about a fire hydrant which at night or low visibility situations will easily identify the location of the hydrant to the fire fighters.

The same type of an assembly can find application in night time, low visibility or low illumination situations with respect to pylons and supports in bodies of water, such as pylons supporting a duck blind, pylons or supports supporting a pier or wharf, and

pylons or supports along traffic thoroughfares where there is little or no street lighting, such as country roads or the like. Further application may also be had to utility poles of aluminum, steel or concrete which line many unilluminated country roads.

OBJECTS OF THE INVENTION

An object of the present invention is to provide for a novel reflective and/or fluorescent member readily securable about a fire hydrant such that the reflective and/or fluorescent capabilities serves to identify the location of the fire hydrant to fire fighters in low visibility situations.

Another object of the present invention is to provide for a novel reflective and/or fluorescent member which is readily securable about a fire hydrant and not facilly removable therefrom.

Another object of the present invention is to provide for a novel reflective and/or fluorescent member which is readily mountable about a pylon or support member partially submerged in a body of water to identify the location of the pylon or support member to water craft in low visibility situations.

A still further object of the present invention is to provide for a novel reflective and/or fluorescent member which is readily securable about a pylon or support, which pylon or support may be partially submerged in a body of water, the reflective and/or

fluorescent member being constructed so as to be impervious to the deleterious affects of the body of water.

A still further object of the present invention is to provide for a novel reflective and/or fluorescent member which is readily securable about a utility pole, aluminum, steel or concrete street light pole, or pylon or other support which may be positioned proximate a thoroughfare and not easily visible in low visibility situations.

SUMMARY OF THE INVENTION

A warning and locator assembly for mounting about a fire hydrant or vehicle obstacle to aid in the warning or identifying of its location, the assembly having the flexible member having an extruded channel defining a slot for the slidable receipt of a substrate and laminated reflective material secured thereto, the reflective material, substrate and extruded channel having a plurality of cooperative apertures therethrough proximate the end of the extruded channel for receipt of a fastening means to secure the assembly in a collar like fashion about the circumference of a fire hydrant or vehicle obstacle.

BRIEF DESCRIPTION OF THE DRAWINGS

These and other objects of the present invention will become evident, particularly when taken in light of the following

illustrations wherein:

Figure 1 is a prospective exploded view of the warning and locator collar in a planar mode;

Figure 2 is a top view of the warning and locator collar;

Figure 3 is an end view of the warning and locator collar;

Figure 4 is a front view of the warning and locator collar secured about a fire hydrant; and

Figure 5 is a front view of the warning and locator collar positioned about a partially submerged pylon.

DETAILED DESCRIPTION OF THE DRAWINGS

Figure 1 is a prospective exploded view of the warning and locator collar assembly 10. It is comprised of an extruded elongated channel 12 which is flexible and which is fabricated of a weather resistant polymer such as polyethylene or the like. Extruded channel 12 is defined by a web 14, depending flanges 16 and 18 which depend from first side 20 of web 14 and which terminate in inwardly turned fingers 22 and 24 respectively. This construction defines a slot 26 formed by web 14 and depending flanges 16 and 18 and inwardly turned flanges 22 and 24 for the slidable receipt of a reflective material 28 which may or may not be laminated to a substrate 30.

Extruded channel is flexible so that it may be formed into a

collar about a fire hydrant or vehicle obstacle and the reflective material 28 and substrate 30 would be similarly flexible to allow for such circumscription about a fire hydrant or vehicle obstacle.

Extruded channel 12 and the reflective and substrate material 28 and 30 respectively, slidably receivable therein, have a plurality of alignable apertures or slots 32 therethrough proximate their respective ends 34, 36 and 38, 40 for the receipt of a fastening means 42. Depending upon the nature of the device or obstacle about which the locator and warning collar is circumscribed, the fastening means 42 may serve to fasten the two ends of the locator and warning collar 10 together or the fastening means 42 may serve to secure the opposing ends of the locator and warning strip 10 together and simultaneously penetrate the pylon or vehicle obstacle about which it is being circumscribed.

Figure 2 is a top view of the warning and locator collar assembly 10 illustrating the slidable receipt of reflective material 28 and substrate 30 within slot 26. Figure 3 is an end view of the warning and locator strip 10 with the reflective material 28 and substrate 30 positioned within slot 26.

Figure 4 is a front view of the warning and locator collar 10 secured about a fire hydrant 40 providing a visually reflective signal to fire fighters of the location of a fire hydrant. Warning

and locator collar assembly 10 is particularly adapted for use on fire hydrants due to the shape of the fire hydrant 40. Fire hydrant 40 is characterized by a top 42 having a flange portion 44. Top 42 provides the fire fighter with access to the valve opening mechanism in order to commence the flow of water. About the cylindrical body 46 of fire hydrant 40 are a plurality of hose bib flanges 48, the covers of which are removable by the fire fighter in order to attach a fire hose. The warning and locator collar assembly 10 would be secured about fire hydrant 40 between its upper flange portion 44 and the plurality of hose bib flanges 48. The warning and locator collar assembly 10 would circumscribe the hydrant body 46 at this location and be secured with an aluminum rivet and end cap or other suitable securing means. The warning and locator collar assembly 10, positioned in such a fashion, is not easily removable from the hydrant 40 by unauthorized persons due to the difficulty in gaining access thereto as it is positioned between the top flange 44 and the hose bib flanges 48.

The reflective material 28 utilized in warning and locator collar assembly 10 may also be varied to serve as a further indicator to firemen. The normal color for identifying a hydrant which was active, that is capable of supplying a source of water, is blue, and therefore active hydrants would have a warning and

locator collar assembly 10 incorporating a blue reflective material 28. If a hydrant 40 was inactive, that is not capable of supplying water for whatever reason, it could be identified with a different reflective material 28 thereby identifying it to firemen as an inactive hydrant such that precious time is not wasted in attempting to secure fire hoses thereto. Additionally, a message stating "NOT IN SERVICE" or ownership identification can be screen printed to the reflective strip.

Figure 5 is a front view of the warning and locator collar assembly 10 secured to a vehicle obstacle 50. The vehicle obstacle 50 could be of many types or forms. For instance, it could represent a utility pole proximate the edge of an unlit roadway thus presenting a potential hazard or obstacle to a land based vehicle. Vehicle obstacle 50 could also be in the form of a pylon or pier support on a waterway. It is this latter type obstacle that is illustrated in Figure 5 in the form of a partially submerged pylon or pier support 50 supporting a platform 52, support 50 being partially submerged in body of water 54. In this configuration, the warning and locator collar assembly 10 is wrapped about the pylon or pier support 50 so as to circumscribe its circumference and the fastening means 42 would be secured through apertures 32 to maintain the warning and locator strip

assembly 10 in its circumscribed position. Depending upon the nature of the material constituting the pylon or pier support, the fastening means 42 may only be required to secure the ends of the warning and locator collar assembly 10 in order to maintain its position about the pylon or pier support 50. Alternatively, a fastening means may be used which not only secures the ends of the warning and locator collar assembly 10 in such a circumscribed position, but may also penetrate the pylon or pier support in order to maintain the circumscribed location of the warning and locator collar assembly 10.

The stratum 30 is not required with respect to the locator and warning assembly if the reflective material 28 is fabricated of a flexible, yet semi-rigid material. However in the preferred embodiment, the reflective material 28 is laminated to a substratum layer 30 which is flexible and semi-rigid and which is fabricated of materials which will be resistant to the weather and corrosion. In that regard, the substratum 30 could be comprised of a suitable polymer, or aluminum or stainless steel of suitable thickness to provide the flexibility for wrapping the assembly as heretofore disclosed.

While the present invention has been described with respect to the exemplary embodiments thereof, it will be recognized by those

of ordinary skill in the art that many changes or modifications may be made without departing from the spirit and scope of the invention. Therefore it is manifestly intended that the invention be limited only by the scope of the claims and the equivalence thereof.

I claim:

1. A reflective warning and locating collar for fire hydrants, pylons or support posts, said reflective warning and locating collar comprising:

a support member having an elongated, flexible, extruded web having a first side and a second side, defined by two parallel longitudinal edges and a first end and a second end, said web having flanges depending from said longitudinal edges of said first side of said web, said flanges terminating with inwardly turned second flanges parallel to said web thereby defining a channel between said web and said inwardly turned second flanges from said first end of said support member to said second end of said support member;

a reflective member comprised of an elongate flexible web slidably receivable and securable within said channel, said support member and said reflective member having a plurality of alignable apertures proximate their ends for alignment and receipt of a fastening means so as to permit said support member and said reflective member to be circumscribably engaged about a fire hydrant, pylon or support post forming a reflective warning and locating collar.

2. The reflective warning and locating collar in accordance

with Claim 1 wherein said web is fabricated from a weather resistant polymer such as polyethylene.

3. The reflective warning and locating collar in accordance with Claim 1 wherein said reflective member is bonded to a substrate, said substrate and said reflective member slidably receivable within said channel of said web.

4. The reflective warning and locating collar in accordance with Claim 1 wherein said ends of said web and said reflective material are secured to each other about said fire hydrant, pylon or support post.

5. The reflective warning and locating collar in accordance with Claim 1 wherein said ends of said web member and said reflective member are secured to said fire hydrant, pylon or support post.

6. A fire hydrant having improved identifiability comprising:

a fire hydrant having a generally vertically tubular member extending upwardly from the ground and in communication with a source of water, a plurality of hose connections extending perpendicularly outwardly from said tubular vertical member, the said hose connections having cap members affixed thereto and said tubular vertical member having a cap member affixed to a top end, said cap member incorporating a valve actuator, said improved

identifiability comprising a reflective warning and locating collar circumscribably engaged about said fire hydrant between said cap member and said outwardly extending hose connections said reflective warning and locating collar comprising a support member having an elongated, flexible extruded web having a first side and a second side, defined by two parallel longitudinal edges and a first end and a second end, said web having flanges depending from said longitudinal edges of said first side of said web, said flanges terminating with inwardly turned second flanges parallel to said web thereby defining a channel between said web and said inwardly turned second flanges from said first end of said support member to said second end of said support member, a reflective member comprised of an elongate flexible web slidably receivable and securable within said channel, said support member and said reflective member having a plurality of alignable apertures proximate there ends for alignment and receipt of a fastening means so as to permit said support member and said reflective member to be circumscribably engaged about said fire hydrant.

7. The reflective warning and locating collar in accordance with Claim 6 wherein said web is fabricated from a weather resistant polymer such as polyethylene.

8. The improved fire hydrant in accordance with Claim 6

wherein a second reflective warning and locating collar is positioned about said fire hydrant beneath said extending hose connections.

ABSTRACT

A reflective warning and locating collar for fire hydrants, pylons or support posts to improve their visibility and identity, the collar having a support member defined by a flexible extruded web having flanges along the longitudinal edges to define a channel slot for receipt of an elongate flexible reflective member in web form slidably receivable within the channel, the ends of the reflective member and support member having a plurality of alignable apertures for receipt of a fastening member.

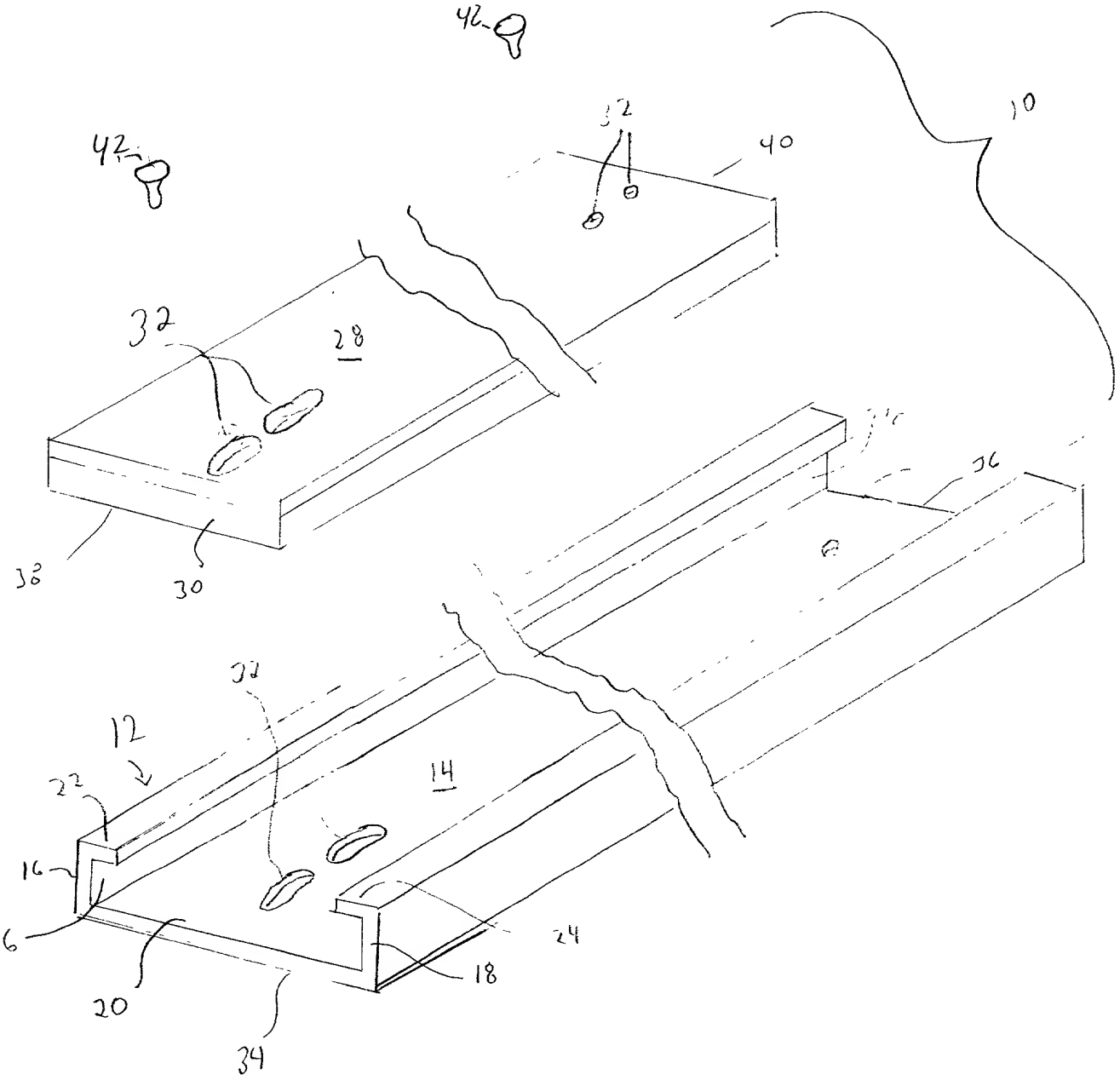
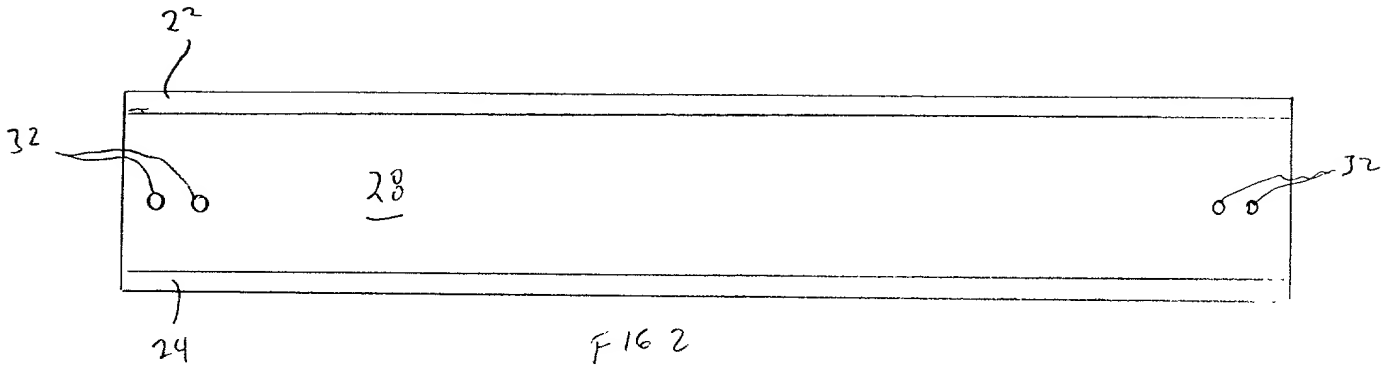
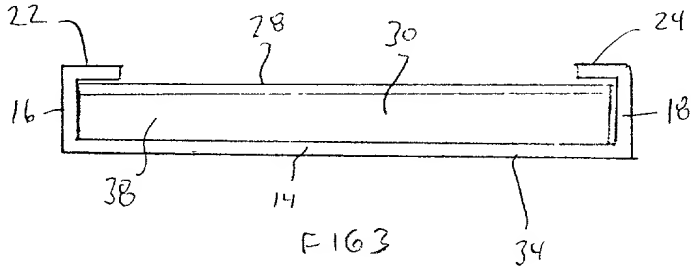


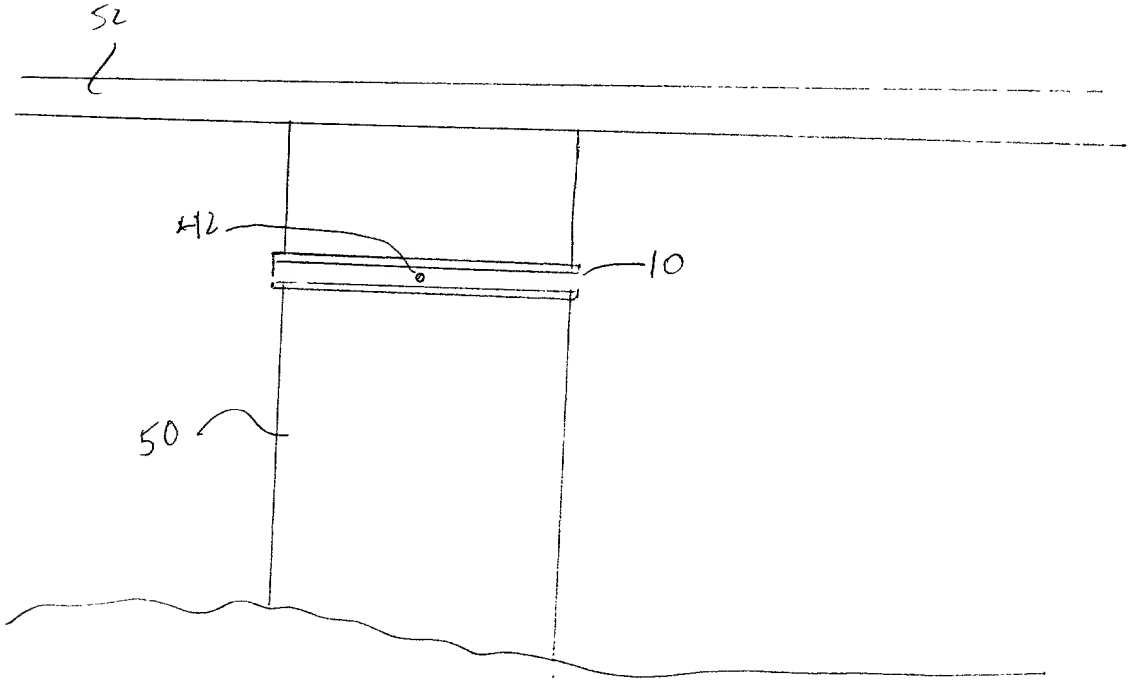
FIG 1



F16 2



F163



F165

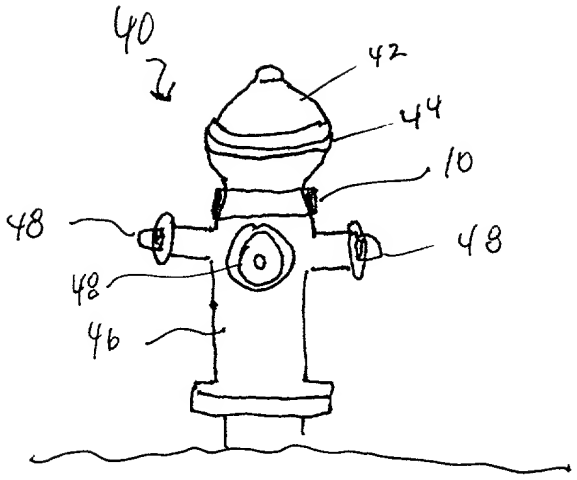


FIG 4

Declaration and Power of Attorney

I, ALBERT A. BURLANDO hereby declare that:
I am a citizen of THE UNITED STATES,
residing at 2 JOY DRIVE, HACKETTSTOWN, NJ 07840-9600; and
verily believe I am the original, first, and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled REFLECTIVE WARNING AND LOCATOR COLLAR FOR HYDRANTS, PYLONS AND SUPPORT POSTS,
the specification of which:

X is attached hereto, or

_____ was filed on _____ as
Application Serial No. _____
and was amended on _____.
(if applicable)

I hereby state that I have reviewed and understood the contents of the above-identified specification including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, 119 of any foreign application for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

(Number)	(Country)	(Day/Month/Year Filed)	Priority Claimed Yes	No

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulation, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

(Application Serial No.)	(Filing Date)	Status

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

I hereby appoint CLIFFORD G. FRAYNE, Registration No. 27,637, and LOUIS E. MARN, Registration No. 19,264, of MARN & ASSOCIATES at 489 AURORA PLACE in BRICK, NEW JERSEY 08723 (Phone: (732-262-2075) my attorney with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Wherefore, I hereby subscribe my name to the foregoing specification and claims, Declaration and Power of Attorney.

Inventor's Signature Albert A. Barlow 5-18-00
(Date)

Post Office Address 2 JOY DRIVE

Hackettstown, NJ 07840-9600